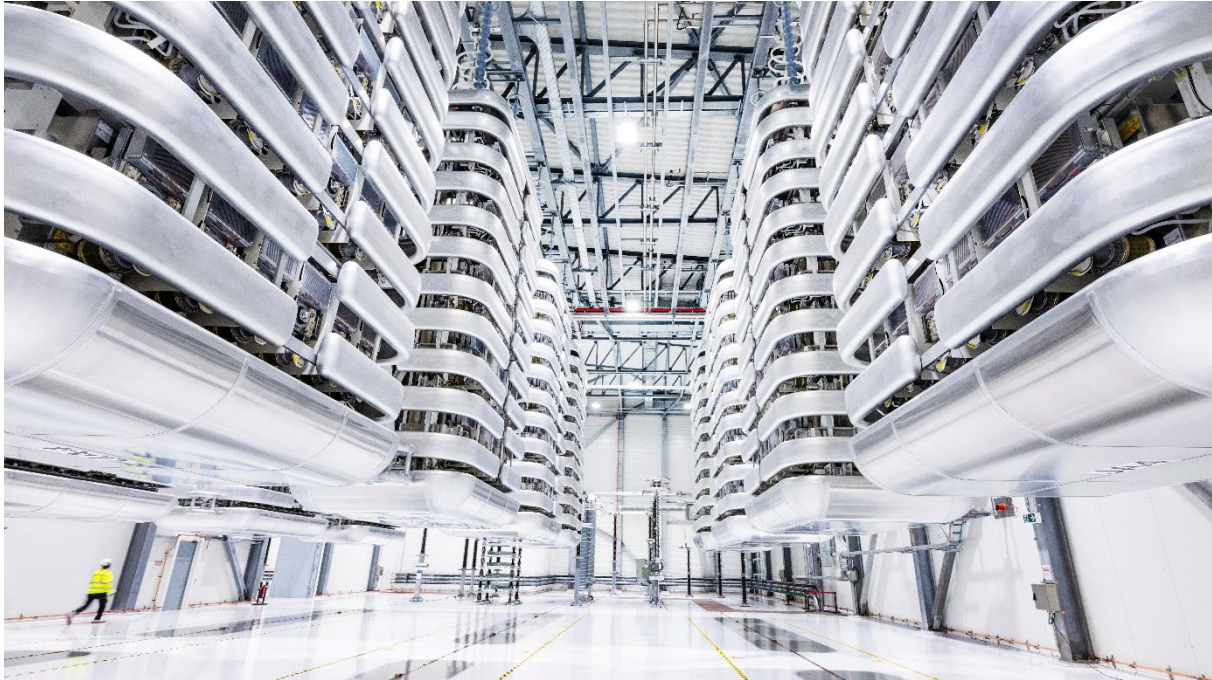


News Release

FOR IMMEDIATE RELEASE

70 years of HVDC: How power electronics are shaping the future of energy



- Hitachi Energy highlights the enabling role of power electronics in the clean energy transition at Power Electronics & Energy Days in Stockholm
- The event showcases innovative technologies that drive renewable integration and decarbonization of demand to advance a sustainable energy future for all
- At the conference, Hitachi Energy celebrates 70 years of HVDC, the pioneering technology at the heart of social innovation

Sweden, October 23, 2024 – This year marks the 70th anniversary of High-Voltage Direct Current (HVDC) technology, a transformative force that has revolutionized power transmission and enabled the integration of renewable energy on a global scale. At Power Electronics & Energy Days in Stockholm, Hitachi Energy celebrates this milestone while highlighting the critical role of power electronics in shaping the future of energy.

HVDC technology has evolved over seven decades to become the cornerstone of efficient, long-distance electricity transmission today. Pioneered by Hitachi Energy in 1954, the company has integrated more than 150-gigawatts (GW) of HVDC links around the world into the power system. Its wide range of applications highlights its potential to transform the global energy landscape toward greater interconnectivity. The technology has evolved from traditional point-to-point connections into advanced multiterminal and multipurpose networks, promising the realization of the vision of meshed offshore grids.

Today, power electronics solutions, including HVDC, play an essential role in integrating bulk renewable energy, decarbonizing power systems, and enhancing grid resilience and flexibility. As the demand for renewable energy surges, power electronics, such as STATCOM, Enhanced-STATCOM and energy storage solutions, coupled with interconnectors between regions and countries, ensure grid security and reliability as both system voltage and frequency

can be stabilized effectively in varying weather conditions.

"Power electronics are transforming how we approach energy systems, enhancing grid stability and supporting the global shift toward sustainable energy," said Niklas Persson, Managing Director, Business Unit Grid Integration, Hitachi Energy. "Power Electronics & Energy Days highlights that the technology is ready now. It is a question of key energy stakeholders collaborating to employ power electronics at speed and scale. At Hitachi Energy, we are committed to driving the innovation and co-creation that empowers countries to build resilient and efficient energy infrastructures."

At this year's Power Electronics & Energy Days, Hitachi Energy showcases its cutting-edge power electronics solutions, designed to meet the challenges of modern grids, which include the increased penetration of renewables, decentralization of power generation as well as the electrification and decarbonization of traditional fossil-based industries. The event emphasizes that power electronics are not just a part of the future - they are pivotal in driving today's energy transition, ensuring that countries worldwide can meet their Net-Zero targets and build sustainable energy infrastructures.

Bringing together key players in the energy transition, the event advocates for more renewables and stresses that the technology needed for the energy transition is available now, challenging countries and stakeholders to prioritize their adoption and warning against falling behind in the evolution of the energy system.

- End -

About Hitachi Energy

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We are advancing the world's energy system to be more sustainable, flexible and secure and we collaborate with customers and partners to enable a sustainable energy future – for today's generations and those to come. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries, serving customers in utility, industry, transportation, data centers and infrastructure sectors. With innovative technologies and services including the integration of more than 150 gigawatts of HVDC links into the power system, we help make the energy value chain more efficient, making electricity more accessible to all. Together with stakeholders across sectors and geographies, we enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. Headquartered in Switzerland, we employ around 45,000 people in 90 countries and generate business volumes of around \$13 billion USD.

<https://www.hitachienergy.com>

<https://www.linkedin.com/company/hitachienergy>

<https://twitter.com/HitachiEnergy>

About Hitachi, Ltd.

Hitachi drives Social Innovation Business, creating a sustainable society through the use of data and technology. We solve customers' and society's challenges with Lumada solutions leveraging IT, OT (Operational Technology) and products. Hitachi operates under the 3 business sectors of "Digital Systems & Services" – supporting our customers' digital transformation; "Green Energy & Mobility" – contributing to a decarbonized society through energy and railway systems, and "Connective Industries" – connecting products through digital technology to provide solutions in various industries. Driven by Digital, Green, and Innovation, we aim for growth through co-creation with our customers. The company's revenues as 3 sectors for fiscal year 2023 (ended March 31, 2024) totaled 8,564.3 billion yen, with 573 consolidated subsidiaries and approximately 270,000 employees worldwide. For more information on Hitachi, please visit the company's website at <https://www.hitachi.com>.

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
